

WHAT IS CLAIMED IS:

1. An optical pickup apparatus, comprising:

a stem;

a light source provided on the stem;

a light detector provided on the stem for detecting light emitted by the light source which is reflected by an optical recording medium; and

a light separating device, divided into at least a first area and a second area, for separating the light incident on each of the first area and the second area into a plurality of light components and directing each of the light components in a prescribed direction,

wherein:

the light detector includes a light receiver, divided into a first light receiving region and a second light receiving region, for receiving the light components directed by the first area of the light separating device,

the first light receiving region and the second light receiving region are located so that a first direction is substantially perpendicular to a second direction, where the first direction is a direction of a phantom straight line connecting a light emitting point

of the light source and a focal point on the light detector of the light transmitted through the light separating device, and the second direction is a direction of a dividing line for dividing the light receiver into the first light receiving region and the second light receiving region, and

a material of the stem and a wavelength of the light from the light source are selected so that a distance of movement of the focal point on the light detector in a direction perpendicular to the second direction is within a prescribed tolerance limit, the movement being caused by a change in the wavelength of the light emitted by the light source and expansion or contraction of the stem, which are both caused by a temperature change of the optical pickup apparatus.

2. An optical pickup apparatus, comprising:

a stem;

a light source provided on the stem;

a light detector provided on the stem for detecting light emitted by the light source and then reflected by an optical recording medium; and

a light separating device, divided into at least a first area and a second area, for separating the light

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incident on each of the first area and the second area into a plurality of light components and directing each of the light components in a prescribed direction,
wherein:

the light detector includes a light receiver, divided into a first light receiving region and a second light receiving region, for receiving the light components directed by the first area of the light separating device,

the first light receiving region and the second light receiving region are located so that a second direction is inclined with respect to a direction perpendicular to a first direction, where the first direction is a direction of a phantom straight line connecting a light emitting point of the light source and a focal point on the light detector of the light transmitted through the light separating device, and the second direction is a direction of a dividing line for dividing the light receiver into the first light receiving region and the second light receiving region, and

the second direction is inclined so that when the focal point on the light detector moves while having a component of the direction perpendicular to the second direction because of a change in the wavelength of the

light emitted by the light source and expansion or contraction of the stem, which are both caused by a temperature change of the optical pickup apparatus, a change in an amount of the light component incident on the first light receiving region and a change in an amount of the light component incident on the second light receiving region are each within a prescribed tolerable limit.

3. An optical pickup apparatus according to claim 1, further comprising a beam splitter for separating a part of the light reflected by the optical recording medium and directing the separated part to the light detector, wherein a material of the stem, a material of the beam splitter, and a wavelength of the light from the light source are selected so that a distance of movement of the focal point on the light detector in a direction perpendicular to the second direction is within a prescribed tolerance limit, the movement being caused by a change in the wavelength of the light emitted by the light source and expansion or contraction of the stem, which are caused by a temperature change of the optical pickup apparatus.

4. An optical pickup apparatus according to claim 2, further comprising a beam splitter for separating a part of the light reflected by the optical recording medium and directing the separated part to the light detector, wherein the second direction is inclined with respect to the direction perpendicular to the first direction so that when the focal point on the light detector moves while having a component of the direction perpendicular to the second direction because of a change in the wavelength of the light emitted by the light source and expansion or contraction of the stem and the beam splitter, which are caused by a temperature change of the optical pickup apparatus, a change in an amount of the light component incident on the first light receiving region and a change an amount of the light component incident on the second light receiving region are each within a prescribed tolerable limit.

5. An optical pickup apparatus according to claim 1, wherein the light separating device is divided into at least the first area and the second area by a dividing line which is substantially perpendicular to a tracking direction of the optical recording medium.

6. An optical pickup apparatus according to claim 2, wherein the light separating device is divided into at least the first area and the second area by a dividing line which is substantially perpendicular to a tracking direction of the optical recording medium.
7. An optical pickup apparatus according to claim 1, wherein the light receiver is divided into at least the first light receiving region and the second light receiving region by the dividing line which is substantially parallel to a dividing line for dividing the light separating device into at least the first area and the second area.
8. An optical pickup apparatus according to claim 2, wherein the light receiver is divided into at least the first light receiving region and the second light receiving region by the dividing line which is substantially parallel to a dividing line for dividing the light separating device into at least the first area and the second area.